PROGRAM DÖKÜM EKİ

- MDE ve BDE
- PIKCHACHANJA
- KARAKTER SETİ
- TURK PAINT
- TURKPACKER

76

COMMODORE

AYLIK BİLGİSAYAR DERGİSİ

Commodore'un Ücretsiz Ekidir

MDE ve BDE

Bu sayıdan itibaren her ay Makine Dili Editörü (MDE) ve Basic Dili Editörü (BDE) programlarını Döküm Eki'mizde bulabilirsiniz. Bu programlar dergimizde yayınlanan programları hatasız yazabilmek için hazırlanmıştır.

Bu programı yazıp, data satırlarında hata yoksa çalıştırdığınız zaman kayıtlı MDE adlı bir programımız olacak. Artık bu programı yükleyip kullanarak dergide yayınlanan makine dili programlarını hatasız olarak yazabileceksiniz.

Programı yükleyip çalıştırdıktan sonra size çeşitli sorular sorulacak. Bunlardan ilki yazacağınız programın adı. Bundan sonra programın başlangıç adresini girmeniz gerekecek. Bu adres dergideki dökümde program adından sonra gelen ilk sayıdan biri olacaktır. Bu sayılar 16'lık düzende oldukları için içlerinde harf de içereceklerdir, şaşırmayın. Sonraki soru yine aynı şekilde girmeniz gereken programın bitiş adresidir. Bu da programın adının yazılı olduğu satırdaki ikinci sayıdır.

Bundan sonra giriş ekranına girilecektir. Artık tek yapmanız gereken dergideki sayıları olduğu gibi yazmak olacak. Bilgisayar sizin girdiğiniz ilk sekiz çift sayıyı dokuzuncu kontrol çiftiyle karşılaştırdıktan sonra yapılan giriş doğruysa ince bir ses verecektir. Eğer herhangi bir yerde hata yapmışsanız bu ses daha kalın ve sinir bozucu olacaktır.

Programın son satırını da yazdıktan sonra MDE size programın nereye kaydedileceğini soracaktır. Teyp için T, disk için D tuşuna basmanız yeterlidir. Kayıt işleminden sonra RUN/STOP RESTORE tuşları ile programdan çıkıp yeni yazdığınız programı çalıştırabilirsiniz.

MDE'nin değişik özellikleri de vardır. Bunlara bir gözatalım:

CTRL-S: Bu tuşlara birlikte basarak programın ortalarındayken kayıt edebilirsiniz. Böylece mümkün bir enerji kesintisinde programınız zarar görmez. Bunu sık sık yapmanızı öneriyoruz.

CTRL-L: PRogramı CTRL-S ile kaydettikten sonra bilgisayarı kapatabilirsiniz. CTRL-L tuşları ile de programı tekrar yükleyip kaldığınız yerden yazmaya devam edebilirsiniz.

CTRL-M: Bir kısmı yazılmış olan programa devam etmek için programı en baştan itibaren incelemeniz gerekir. Boşluk tuşuna basarak programın listesini inceleyin. Sizin yazıyı bıraktığınız satır, toplam sayı hariç AA ile dolu olacaktır. Bu satır numarasını öğrendikten sonra RUN/STOP tuşu ile ana menüye gelin.

CTRL-N: Ana menüye geldikten sonra bu tuş ile yazmaya devam edeceğiniz satır numarasını girin ve dergiden program yazmaya devam edin.

CTRL-P: Bu emirle de elinizdeki herhangi bir dökümanı yazıcıya bastırabilirsiniz.

BDE

Bu programı yazmak için MDE'yi kullanmanız gerekir. Kaydedilen programı diskten veya kasetten yükleyip dergideki BASIC programları yazmak için kullanacaksınız.

Dergide dökümler içinde altı çizili olan harfler SHIFT'le, üstü çizili olan harfler de COMMODORE tuşuyla basıldığında ortaya çıkar. Siz bunları yapınca altı çizili bir harf değil esas istenen grafik karakteri görünecektir.

Siz satırı yazdıktan sonra ekranın sol üst köşesinde beliren sayı dergidekiyle uyuşuyorsa satırı doğru yazmışsınız demektir. Aksi taktirde bir hata vardır.

Dergideki listede görünecek olan başka karakterler de vardır. Bunlar sizin yazmanızı kolaylaştırmak için hazırlanmıştır:

CLR - Klavyenin sağ üstündeki ikinci tuş. Kursoru ekranın sol üst köşesine taşır.

HOME - CLR tuşuna SHIFT ile basıldığında ekranı temizler.

RVSON - CTRL ve 9 tuşlarına beraber basarak negatif yazıma geçer.

RVSOFF - CTRL ve 0 tuşlarına beraber basarak pozitif yazıma geçer.

DOWN - Kursor aşağı tuşu.

UP - Kursor yukarı tuşu.

RIGHT - Kursor sağa tuşu.

LEFT - Kursor sola tuşu.

SPACE - Boşluk tuşu.

Bunların dışında CTRL ve COMMODORE tuşları kombinasyonları da vardır. Eğer işaretleri arasında yukarıda saydığımız kelimelerden birinden önce bir sayı varsa, o tuşa o sayıda basılacak demektir.

PROGRAM ADI : MDE

```
00001 PRINT "<CLR>":CS=0:S$="SAVE"+CHR$(34)+"MDE"+C
      HR$(34)                                          <163>
00002 FOR  D=10240  TO  12005:READ P:CS=CS+P:POKE D
      ,P:PRINT "<HOME>"12005-D"<LEFT> ":NEXT           <049>
00003 IF CS<>210624 THEN PRINT "<CLR> DATALAR HATAL
      I.":END                                          <228>
00004 PRINT "<CLR>DATALAR ALINDI.KAYIT ICIN K VEYA
      D'YE<3SPACE>BASIN (K=KASET, D=DISK)."            <019>
00005 GET A$:IF A$="" THEN 5                           <226>
00006 IF A$="D" THEN S$=S$+",8"                        <189>
00007 PRINT "<CLR>SYS11953":PRINT "<2DOWN>"S$:PRINT
       "<HOME>";:POKE 198,3:POKE 631,145:POKE 632,1
      45                                               <183>
00008 POKE 633,13:END                                  <252>
00099 REM    *****  MDE  *****                         <057>
00100 DATA  0,11,8,10,0,158,50,48                      <044>
00102 DATA  54,49,0,0,0,162,8,169                      <210>
00104 DATA  54,133,164,169,8,133,165,169               <033>
00106 DATA  0,133,166,169,176,133,167,160              <130>
00108 DATA  0,177,164,145,166,200,208,249              <230>
00110 DATA  230,165,230,167,202,208,242,169            <173>
00112 DATA  54,133,1,76,0,176,32,209                   <059>
00114 DATA  177,169,6,141,33,208,169,3                 <188>
00116 DATA  141,32,208,141,134,2,160,179               <174>
00118 DATA  169,116,32,255,177,160,179,169             <020>
00120 DATA  185,32,255,177,160,0,32,207                <005>
00122 DATA  255,153,1,2,200,201,13,208                 <169>
00124 DATA  245,136,240,210,192,15,144,2               <128>
00126 DATA  160,14,140,0,2,32,234,177                  <180>
00128 DATA  160,179,169,207,32,255,177,32              <079>
00130 DATA  142,180,133,252,133,98,32,142              <224>
00132 DATA  180,133,251,133,97,32,167,180              <089>
00134 DATA  208,32,160,179,169,229,32,255              <225>
00136 DATA  177,32,142,180,133,96,32,142               <001>
00138 DATA  180,133,95,32,167,180,208,10               <078>
00140 DATA  165,97,197,95,165,98,229,96                <031>
00142 DATA  144,6,32,67,179,76,58,176                  <057>
00144 DATA  169,170,160,0,145,251,230,251              <110>
00146 DATA  208,2,230,252,32,63,178,144                <122>
00148 DATA  239,76,251,180,162,2,134,88                <203>
00150 DATA  169,166,160,157,32,242,177,32              <095>
00152 DATA  228,255,240,251,201,48,144,12              <026>
00154 DATA  201,71,176,8,201,58,144,11                 <182>
00156 DATA  201,65,176,7,201,20,208,15                 <143>
00158 DATA  76,11,177,32,210,255,166,88                <095>
00160 DATA  149,247,198,88,208,210,96,174              <082>
00162 DATA  141,2,240,38,201,12,208,3                  <016>
00164 DATA  76,11,182,201,19,208,3,76                  <026>
00166 DATA  139,181,201,13,208,3,76,186                <196>
00168 DATA  180,201,16,208,3,76,104,181                <086>
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00170 DATA  201,14,208,6,32,95,180,76                <250>
00172 DATA  100,177,76,146,176,165,249,32            <152>
00174 DATA  2,177,10,10,10,10,133,249                <075>
00176 DATA  165,248,32,2,177,5,249,96                <043>
00178 DATA  201,58,144,2,105,8,41,15                 <083>
00180 DATA  96,166,89,224,8,144,31,166               <098>
00182 DATA  88,224,2,176,6,32,210,255                <231>
00184 DATA  76,142,176,198,89,160,20,169             <066>
00186 DATA  146,32,242,177,202,208,250,132           <068>
00188 DATA  87,104,104,76,139,177,166,211            <222>
00190 DATA  224,8,176,3,76,146,176,32                <195>
00192 DATA  210,255,166,88,224,2,144,9               <116>
00194 DATA  198,89,32,210,255,198,88,208             <231>
00196 DATA  249,76,142,176,72,74,74,74               <006>
00198 DATA  74,32,89,177,104,41,15,201               <174>
00200 DATA  10,144,2,105,6,105,48,76                 <196>
00202 DATA  210,255,162,252,154,32,209,177           <163>
00204 DATA  32,72,178,32,234,177,32,159              <229>
00206 DATA  178,165,252,32,78,177,165,251            <019>
00208 DATA  32,78,177,32,237,177,169,58              <226>
00210 DATA  160,32,32,242,177,169,0,133              <029>
00212 DATA  89,32,142,176,32,237,177,164             <072>
00214 DATA  89,32,239,176,145,251,200,132            <041>
00216 DATA  89,192,8,144,236,32,16,178               <169>
00218 DATA  169,18,32,210,255,32,142,176             <022>
00220 DATA  32,239,176,197,255,240,13,32             <069>
00222 DATA  67,179,169,20,160,20,32,242              <176>
00224 DATA  177,76,162,177,169,146,32,210            <225>
00226 DATA  255,32,51,178,32,224,178,32              <118>
00228 DATA  63,178,144,159,76,139,181,169            <091>
00230 DATA  147,32,210,255,162,0,169,3               <180>
00232 DATA  157,0,216,157,0,217,157,0                <237>
00234 DATA  218,157,0,219,232,208,239,96             <194>
00236 DATA  169,13,44,169,32,76,210,255              <160>
00238 DATA  32,210,255,152,76,210,255,32             <092>
00240 DATA  228,255,240,251,96,132,93,133            <091>
00242 DATA  92,160,0,177,92,240,6,32                 <004>
00244 DATA  210,255,200,208,246,96,165,251           <160>
00246 DATA  133,90,160,0,132,91,177,251              <239>
00248 DATA  24,101,90,133,90,144,2,230               <103>
00250 DATA  91,6,90,38,91,200,192,8                  <152>
00252 DATA  144,236,165,90,101,91,133,255            <053>
00254 DATA  96,24,165,251,105,8,133,251              <021>
00256 DATA  144,2,230,252,96,165,251,197             <172>
00258 DATA  95,165,252,229,96,96,160,179             <028>
00260 DATA  169,251,32,255,177,160,1,185             <118>
00262 DATA  0,2,32,210,255,204,0,2                   <190>
00264 DATA  200,144,244,169,16,237,0,2               <095>
00266 DATA  170,32,237,177,202,208,250,165           <211>
00268 DATA  98,32,78,177,165,97,32,78                <159>
00270 DATA  177,32,237,177,165,96,32,78              <232>
00272 DATA  177,165,95,32,78,177,169,159             <027>
00274 DATA  32,210,255,32,234,177,36,94              <110>
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00276 DATA  16,1,96,169,18,32,210,255                <104>
00278 DATA  162,40,32,237,177,202,208,250            <159>
00280 DATA  169,146,76,210,255,165,214,201           <166>
00282 DATA  22,176,1,96,169,160,133,164              <161>
00284 DATA  169,120,133,166,169,4,133,165            <117>
00286 DATA  133,167,162,19,160,39,177,164            <196>
00288 DATA  145,166,136,16,249,202,240,25            <114>
00290 DATA  24,165,164,105,40,133,164,144            <097>
00292 DATA  2,230,165,24,165,166,105,40              <072>
00294 DATA  133,166,144,224,230,167,76,182           <009>
00296 DATA  178,169,145,76,210,255,169,15            <219>
00298 DATA  141,24,212,169,0,141,5,212               <234>
00300 DATA  169,247,141,6,212,169,17,141             <131>
00302 DATA  4,212,169,50,141,1,212,169               <017>
00304 DATA  0,141,0,212,160,128,32,9                 <034>
00306 DATA  179,169,16,141,4,212,96,162              <099>
00308 DATA  255,202,208,253,136,208,248,96           <238>
00310 DATA  169,15,141,24,212,169,45,141             <208>
00312 DATA  5,212,169,165,141,6,212,169              <135>
00314 DATA  33,141,4,212,169,7,141,1                 <051>
00316 DATA  212,169,5,141,0,212,160,255              <000>
00318 DATA  32,9,179,169,32,141,4,212                <087>
00320 DATA  169,0,141,1,212,141,0,212                <184>
00322 DATA  96,56,32,240,255,138,72,152              <204>
00324 DATA  72,24,160,6,162,24,32,240                <214>
00326 DATA  255,160,180,169,10,32,255,177            <041>
00328 DATA  32,18,179,32,228,255,240,251             <209>
00330 DATA  162,29,169,20,32,210,255,202             <030>
00332 DATA  208,250,104,168,104,170,24,76            <168>
00334 DATA  240,255,13,13,13,32,32,32                <144>
00336 DATA  32,32,32,32,32,32,32,77                  <180>
00338 DATA  65,75,73,78,65,32,68,73                  <236>
00340 DATA  76,73,32,69,68,73,84,79                  <112>
00342 DATA  82,85,32,32,32,32,13,13                  <151>
00344 DATA  32,32,32,32,32,32,32,32                  <174>
00346 DATA  32,32,32,32,32,32,32,32                  <176>
00348 DATA  32,32,32,32,32,32,32,32                  <178>
00350 DATA  32,32,32,32,32,32,0,13                   <241>
00352 DATA  13,13,32,32,32,80,82,79                  <109>
00354 DATA  71,82,65,77,32,65,68,73                  <008>
00356 DATA  32,32,58,32,0,13,13,32                   <023>
00358 DATA  32,32,66,65,83,76,65,78                  <071>
00360 DATA  71,73,67,32,65,68,46,58                  <089>
00362 DATA  32,36,0,13,13,32,32,32                   <014>
00364 DATA  66,73,84,73,83,32,65,68                  <193>
00366 DATA  82,69,83,73,32,58,32,36                  <222>
00368 DATA  0,146,5,32,80,82,79,71                   <244>
00370 DATA  82,65,77,32,32,58,32,0                   <031>
00372 DATA  18,32,32,42,42,42,32,32                  <175>
00374 DATA  32,89,65,78,76,73,83,96                  <177>
00376 DATA  86,69,82,73,32,32,32,42                  <229>
00378 DATA  42,42,32,32,146,0,13,13                  <002>
00380 DATA  42,42,42,32,83,79,78,32                  <235>
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00382 DATA 42,42,42,32,0,19,5,32                    <230>
00384 DATA 32,18,68,146,73,83,75,32                 <213>
00386 DATA 86,69,89,65,32,18,84,146                 <094>
00388 DATA 69,89,80,13,0,19,32,32                   <130>
00390 DATA 73,47,79,32,45,32,72,65                  <000>
00392 DATA 84,65,83,73,0,32,209,177
00394 DATA 32,72,178,160,179,169,207,32             <122>
00396 DATA 255,177,32,142,180,133,252,32            <202>
00398 DATA 142,180,133,251,197,97,165,252           <005>
00400 DATA 229,98,144,35,165,251,197,95             <162>
00402 DATA 165,252,229,96,176,25,32,167             <157>
00404 DATA 180,208,20,96,32,167,180,240             <154>
00406 DATA 12,133,249,32,167,180,240,5              <035>
00408 DATA 133,248,76,239,176,104,104,32            <224>
00410 DATA 67,179,76,95,180,32,207,255              <219>
00412 DATA 201,76,208,9,32,209,177,32               <005>
00414 DATA 72,178,76,11,182,201,13,96               <037>
00416 DATA 169,0,133,94,32,95,180,32                <026>
00418 DATA 234,177,32,13,181,36,94,48               <081>
00420 DATA 5,32,228,255,240,251,32,225              <177>
00422 DATA 255,240,38,32,159,178,36,94              <014>
00424 DATA 16,9,32,78,181,32,13,181                 <018>
00426 DATA 32,96,181,32,51,178,32,63                <014>
00428 DATA 178,144,215,160,180,169,40,32            <252>
00430 DATA 255,177,32,228,255,201,13,208            <185>
00432 DATA 249,169,0,133,94,165,97,133              <008>
00434 DATA 251,165,98,133,252,32,224,178            <200>
00436 DATA 76,100,177,165,252,32,78,177             <089>
00438 DATA 165,251,133,255,32,78,177,169            <182>
00440 DATA 32,160,58,32,242,177,160,0               <183>
00442 DATA 32,237,177,177,251,32,78,177             <057>
00444 DATA 200,192,8,144,243,32,237,177             <132>
00446 DATA 36,94,48,3,169,18,44,169                 <173>
00448 DATA 32,32,210,255,32,16,178,165              <218>
00450 DATA 255,32,78,177,169,146,32,210             <198>
00452 DATA 255,76,234,177,169,255,133,184           <034>
00454 DATA 133,185,169,4,133,186,32,192             <170>
00456 DATA 255,162,255,76,201,255,32,204            <044>
00458 DATA 255,169,255,76,195,255,32,95             <200>
00460 DATA 180,169,128,133,94,32,78,181             <063>
00462 DATA 32,72,178,162,36,169,45,32               <208>
00464 DATA 210,255,202,208,250,32,234,177           <170>
00466 DATA 32,234,177,32,96,181,76,193              <086>
00468 DATA 180,32,184,181,166,95,164,96             <036>
00470 DATA 169,97,32,216,255,176,10,32              <000>
00472 DATA 183,255,41,191,208,3,76,251              <007>
00474 DATA 180,169,1,32,195,255,32,104              <167>
00476 DATA 182,160,180,169,79,32,255,177            <071>
00478 DATA 32,249,177,76,251,180,32,104             <159>
00480 DATA 182,169,55,160,180,32,255,177            <252>
00482 DATA 32,249,177,162,8,201,68,240              <204>
00484 DATA 6,162,1,201,84,208,241,169               <102>
00486 DATA 1,168,32,186,255,160,0,224               <120>
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00488 DATA  1,240,26,169,64,141,32,2                    <234>
00490 DATA  169,58,141,33,2,185,1,2                     <201>
00492 DATA  153,34,2,200,204,0,2,144                    <056>
00494 DATA  244,200,200,208,12,185,1,2                  <056>
00496 DATA  153,32,2,200,204,0,2,208                    <067>
00498 DATA  244,152,162,32,160,2,76,189                 <205>
00500 DATA  255,32,184,181,165,186,201,8                <044>
00502 DATA  144,51,166,185,134,87,169,1                 <189>
00504 DATA  32,195,255,169,96,133,185,32                <172>
00506 DATA  192,255,176,40,165,186,32,180               <252>
00508 DATA  255,165,185,32,150,255,32,165               <125>
00510 DATA  255,133,97,165,144,74,74,176                <158>
00512 DATA  19,32,165,255,133,98,32,171                 <255>
00514 DATA  255,165,87,133,185,169,0,32                 <169>
00516 DATA  213,255,144,3,76,163,181,134                <099>
00518 DATA  95,132,96,165,186,201,1,208                 <112>
00520 DATA  10,173,61,3,133,97,173,62                   <174>
00522 DATA  3,133,98,76,251,180,169,19                  <174>
00524 DATA  32,210,255,162,28,32,237,177                <051>
00526 DATA  202,208,250,96,170,170,170,170              <029>
00528 DATA  0,120,160,0,185,0,40,153                    <037>
00530 DATA  0,8,136,208,247,238,182,46                  <047>
00532 DATA  238,185,46,173,182,46,201,47                <036>
00534 DATA  208,232,169,14,133,46,133,48                <246>
00536 DATA  133,50,169,177,133,45,133,47                <064>
00538 DATA  133,49,169,1,133,198,169,13                 <112>
00540 DATA  141,119,2,88,96,0                           <106>
```

PROGRAM : BDE 0801 0968

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0801 : 0D 08 C2 07 9E 32 30 36  4C
0809 : 33 3A A2 00 00 00 A9 00  A9
0811 : 85 FE A2 01 BD 64 09 85  0C
0819 : FF A0 00 B1 FE 91 FE 88  28
0821 : D0 F9 E6 FF A5 FF DD 66  46
0829 : 09 D0 EE CA 10 E6 A9 74  77
0831 : A0 08 85 5F 84 60 A9 EC  EE
0839 : A0 08 85 5A 84 5B A9 D8  05
0841 : A0 E4 85 58 84 59 20 BF  D3
0849 : A3 A9 EC A0 08 85 5F 84  43
0851 : 60 A9 64 A0 09 85 5A 84  E2
0859 : 5B A9 37 A0 E4 85 58 84  50
0861 : 59 20 BF A3 A9 35 85 01  8B
0869 : A9 60 8D 31 A5 A9 E4 8D  22
0871 : 32 A5 60 A0 02 A9 00 AA  65
0879 : 85 FE B1 5F F0 28 C9 20  8D
0881 : D0 03 C8 D0 F5 85 FF 8A  C0
0889 : 29 07 AA F0 0E 48 A5 FF  B8
0891 : 18 2A 69 00 CA D0 F9 85  3F
0899 : FF 68 AA E8 A5 FF 18 65  19
08A1 : FE 85 FE 4C 6F E4 C0 04  D4
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08A9 : 30 DB C6 D6 A5 D6 48 A2  CB
08B1 : 03 A9 20 9D 01 04 BD D4  15
08B9 : E4 20 D2 FF D0 0C 00 5C  88
08C1 : 48 20 C9 FF AA 68 90 01  BE
08C9 : 8A 60 CA 10 E4 A6 FE A9  0B
08D1 : 00 20 CD BD A9 3E 20 D2  BF
08D9 : FF 68 85 D6 20 6C E5 A9  99
08E1 : 8D 20 D2 FF 4C BF E3 09  97
08E9 : 3C 12 13 A9 3A 20 D2 FF  18
08F1 : A9 20 20 D2 FF A9 00 85  65
08F9 : FB A0 04 88 F0 1F 20 CF  7F
0901 : FF C9 0D F0 18 38 E9 30  92
0909 : 48 A2 0A A9 00 18 65 FB  A8
0911 : CA D0 FA 85 FB 68 65 FB  43
0919 : 85 FB 4C CF E3 A9 8D 20  AB
0921 : D2 FF A9 00 8D 05 D4 A9  05
0929 : F8 8D 06 D4 A9 0F 8D 18  7D
0931 : D4 A5 FB C5 FE F0 09 A9  7E
0939 : E8 A2 06 A0 81 4C 1A E4  B5
0941 : A9 8A A2 3A A0 21 8D 00  68
0949 : D4 8E 01 D4 8C 04 D4 A2  C1
0951 : 00 A0 00 EA C8 D0 FC E8  D8
0959 : D0 F9 8E 18 D4 8E 04 D4  48
0961 : 4C 80 A4 A0 E0 C0 00 E0  00
```

Pikchachanja

Hakan Ulugerçek

Basit bir animasyon programı olan Pikchachanja'da (kısaca Pik) çizilen iki şekil arasında bir geçiş sağlanır. AMIGA'da DeluxePaint4 ile gerçekleştirilen bu tür efektlerden daha verimli olan Pik'le ana menüde şu özellikler bulunmaktadır:

1. Resim çizimi: Burada ekranın üst kısmında Q, Z, O ve P harfleriyle kontrol edilen nokta grafiğin köşelerini belirtir. F1 tuşu ile yeni bir nokta tanımlamak ve F3 ile bir önceki noktadan yeni noktaya çizgi çekmek mümkündür. Bu arada çizgi adımını artırmak için yukarı ok, azaltmak için * karakterleri kullanılabilir. Resim bittiği zaman İngiliz Pound'u (£) işaretiyle ikinci şeklin çizimine geçilir. İkinci resim de bittikten sonra yine Pound (£) işaretiyle animasyonun hazırlanmasına geçilir.

2. Resim kaydetme: Vereceğiniz isimle bir animasyon kaydedilir.

3. Resim yükleme: Vereceğiniz isimdeki dosya yüklenir.

4. Animasyon izleme: Hazırlanan animasyonu izleme.

```
00001 IF A=0 THEN  A=1:LOAD"PICHA ML*",8,1                    <166>
00010 POKE 53281,15                                           <146>
00040 POKE 55,70:POKE 51,70:POKE 56,29:POKE 52,2
      LR                                                      <059>
00050 POKE 650,128                                            <223>
00058 MD=7664:LO=7609:PL=7540:SA=7562:UN=7551:SE=77
      12                                                      <016>
```

```
00070 ZP=248                                                    <203>
00080 N=70                                                      <151>
00100 :                                                         <076>
00110 :                                                         <086>
00120 :                                                         <096>
00150 :                                                         <126>
00160 :                                                         <136>
00165 :                                                         <141>
00170 :                                                         <146>
00175 :                                                         <151>
00180 :                                                         <156>
00185 :                                                         <161>
00200 DIM A%(N,4)                                               <114>
00210 FOR CP=0 TO N:FOR J=0 TO 4                                <057>
00220 A%(CP,J)=0:NEXT :NEXT                                     <199>
00230 X=50:X1=X:Y=25:Y1=Y:DI=5:F=17                             <242>
00240 PRINT "<CLR><CTRL-7><15DOWN>"SPC(10)"1)RESIM
      CIZME"                                                    <053>
00250 POKE ZP,1:POKE ZP+1,0:SYS SE                              <024>
00270 PRINT SPC(10)"2)DATA KAYDI"                               <180>
00280 PRINT SPC(10)"3)DATA YUKLEME"                             <048>
00290 PRINT SPC(10)"4)ANIMASYON IZLEME"                         <142>
00300 GET A$:IF A$="" THEN  300                                 <239>
00310 A=VAL(A$):IF A<1 OR A>4 THEN 300                          <240>
00313 PRINT "<CLR>":POKE ZP,1:POKE ZP+1,0:SYS SE                <055>
00317 C=X:D=Y:GOSUB 1000                                        <184>
00320 ON AGOSUB 2910,4000,5000,6000                             <091>
00330 GOTO 240                                                  <076>
00360 :                                                         <082>
00365 :                                                         <087>
00368 :                                                         <090>
00370 FOR CP=0 TO N:PRINT "<CLR><15DOWN>"TAB(25)CP"
      <LEFT><2SPACE>":PRINT TAB(25)DI"<LEFT> <UP>               <086>
00400 GOSUB 700                                                 <138>
00405 IF A$="ö" THEN  485                                       <114>
00410 IF A$="<F5>" THEN  450                                    <164>
00415 :                                                         <137>
00420 C=X1:D=Y1:GOSUB 1000                                      <238>
00430 A%(CP,4)=0                                                <195>
00440 GOTO 480                                                  <010>
00445 :                                                         <167>
00450 IF CP=0 THEN  420                                         <158>
00455 GOSUB 800                                                 <201>
00460 A%(CP,4)=1                                                <233>
00480 X=X1:Y=Y1:A%(CP,0)=X:A%(CP,1)=Y:NEXT                      <148>
00485 A%(CP,4)=2:CP=N+1:RETURN                                  <162>
00492 :                                                         <214>
00495 :                                                         <217>
00498 :                                                         <220>
00500 FOR CP=0 TO N:PRINT "<CLR><15DOWN>"TAB(25)CP"
      <LEFT><2SPACE>":PRINT TAB(25)DI"<LEFT> <UP>               <216>
00510 IF A%(CP,4)=2 THEN 620                                    <065>
00520 GOSUB 700                                                 <004>
```

```
00530 IF A%(CP,4)=1 THEN 590                                    <138>
00540 :                                                         <008>
00550 C=X1:D=Y1:GOSUB 1000                                      <114>
00570 GOTO 610                                                  <046>
00580 :                                                         <048>
00590 IF CP=0 THEN 550                                          <051>
00595 GOSUB 800                                                 <087>
00610 X=X1:Y=Y1:A%(CP,2)=X:A%(CP,3)=Y:NEXT                      <096>
00620 CP=N+1:RETURN                                             <140>
00692 :                                                         <160>
00696 :                                                         <164>
00699 :                                                         <167>
00700 GET A$:IF A$="" THEN 700                                  <001>
00705 C=X1:D=Y1:GOSUB 2000                                      <045>
00710 IF A$="Q" THEN Y1=Y1-DI:GOTO 774                          <016>
00720 IF A$="Z" THEN Y1=Y1+DI:GOTO 776                          <159>
00730 IF A$="P" THEN X1=X1+DI:GOTO 772                          <127>
00740 IF A$="O" THEN X1=X1-DI:GOTO 770                          <008>
00750 IF A$="<F1>" OR A$="<F5>" OR A$="" THEN RETU
      RN                                                        <003>
00755 IF A$="*" THEN DI=DI-1:IF DI<1 THEN DI=1                  <081>
00760 IF A$="^" THEN DI=DI+1:IF DI>10 THEN DI=10                <206>
00762 PRINT TAB(25)DI"<LEFT> <UP>                               <069>
00765 C=X1:D=Y1:GOSUB 1000:GOTO 700                             <165>
00770 IF X1<0  THEN X1=319:GOTO 782                             <120>
00772 IF X1>319  THEN X1=0:GOTO 782                             <011>
00774 IF Y1<0 THEN Y1=0:GOTO 782                                <097>
00776 IF Y1>47 THEN Y1=47:GOTO 782                              <147>
00782 C=X1:D=Y1:GOSUB 1000                                      <092>
00784 GOTO 700                                                  <254>
00790 :                                                         <004>
00799 :                                                         <013>
00800 IF X1=X THEN 865                                          <223>
00805 IF Y1=Y THEN 900                                          <014>
00810 T=(Y1-Y)/(X1-X):H=SQR((X1-X)^2+(Y1-Y)^2)                  <090>
00820 S=(X1-X)/H                                                <108>
00830 FOR I=X TO X1 STEP S                                      <240>
00840 Y3=INT(Y+(T*(I-X))+.5)                                    <098>
00850 C=I:D=Y3:GOSUB 1000                                       <143>
00860 NEXT :RETURN                                              <037>
00862 :                                                         <076>
00865 IF Y1=Y THEN  RETURN                                      <127>
00870 FOR Y3=Y TO Y1 STEP SGN(Y1-Y)                             <236>
00880 C=X:D=Y3:GOSUB 1000                                       <158>
00890 NEXT :RETURN                                              <067>
00895 :                                                         <109>
00900 FOR I=X TO X1 STEP SGN(X1-X)                              <230>
00910 C=I:D=Y:GOSUB 1000                                        <028>
00920 NEXT  :RETURN                                             <097>
00990 :                                                         <204>
01000 POKE ZP,D:POKE ZP+1,0:IF C<256 THEN 1020                  <214>
01010 POKE ZP+1,1:C=C-256                                       <048>
01020 POKE ZP+2,C:SYS PL:RETURN                                 <143>
```

```
01990 :                                                    <188>
02000 POKE ZP,D:POKE ZP+1,0:IF C<256 THEN  2020            <071>
02010 POKE ZP+1,1:C=C-256                                  <032>
02020 POKE ZP+2,C:SYS UM:RETURN                            <199>
02900 :                                                    <082>
02910 PRINT "<HOME><13DOWN><3SPACE>NOKTA NUMARASI="        <185>
02920 PRINT "<5SPACE>PIKSEL ADIMI=<2UP>"                   <011>
03000 GOSUB 370:SYS MD                                     <222>
03010 POKE ZP+2,0:SYS SA                                   <208>
03016 C=X:D=Y:GOSUB 1000                                   <087>
03020 GOSUB 500                                            <202>
03030 POKE ZP+2,17:SYS SA                                  <240>
03090 FOR W=1 TO (F-1)                                     <034>
03100 FOR CP=0 TO N                                        <091>
03110 IF A%(CP,4)=2 THEN 3185                              <175>
03120 X1=A%(CP,0)+INT(((A%(CP,2)-A%(CP,0))*W/17)+.5
      )                                                    <239>
03130 Y1=A%(CP,1)+INT(((A%(CP,3)-A%(CP,1))*W/17)+.5
      )                                                    <008>
03140 IF A%(CP,4)=0 THEN C=X1:D=Y1:GOSUB 1000              <134>
03160 IF A%(CP,4)=1 THEN GOSUB 800                         <218>
03180 X=X1:Y=Y1:NEXT                                       <128>
03185 CP=N+1:SYS MD                                        <116>
03190 POKE ZP+2,W:SYS SA                                   <173>
03200 NEXT W:RETURN                                        <208>
03990 :                                                    <156>
04000 SYS 7981                                             <215>
04002 PRINT "<CLR><15DOWN><5SPACE>DATA KAYDI "             <168>
04005 PRINT "DOSYA ADI";                                   <142>
04010 INPUT NM$                                            <168>
04020 PRINT "<RVSON>T<RVSOFF>APE MI <RVSON>D<RVSOFF
      >ISK MI?"                                            <033>
04030 GET X$:IF X$="" THEN 4030                            <178>
04040 IF X$="T" THEN 4080                                  <107>
04050 IF X$<>"D" THEN 4030                                 <081>
04060 OPEN 1,8,4,"0:"+NM$+",S,W"                           <162>
04070 GOTO 4090                                            <001>
04080 OPEN 1,1,1,NM$                                       <190>
04090 FOR CP=0 TO N:FOR G=0 TO 4                           <103>
04100 BT=A%(CP,G):PRINT#1,BT                               <228>
04110 NEXT                                                 <056>
04120 NEXT :CLOSE 1                                        <067>
04130 RETURN                                               <124>
04990 :                                                    <140>
05000 SYS 7981                                             <199>
05002 PRINT "<CLR><15DOWN><5SPACE>DATA YUKLEME"            <093>
05005 PRINT "DOSYA ADI";                                   <126>
05010 INPUT NM$                                            <152>
05020 PRINT "<RVSON>T<RVSOFF>APE MI <RVSON>D<RVSOFF
      >ISK MI?"                                            <017>
05030 GET X$:IF X$="" THEN 5030                            <194>
05040 IF X$="T" THEN 5080                                  <095>
```

```
05050 IF X$<>"D" THEN 5030                                          <073>
05060 OPEN 1,8,4,"0:"+NM$+",S,R"                                    <081>
05070 GOTO 5090                                                     <249>
05080 OPEN 1,1,0,NM$                                                <046>
05090 FOR CP=0 TO N:FOR G=0 TO 4                                    <087>
05100 INPUT#1,BT:A%(CP,G)=BT                                        <164>
05110 NEXT                                                          <038>
05120 NEXT :CLOSE 1                                                 <051>
05125 POKE ZP,1:POKE ZP+1,0:SYS SE                                  <075>
05130 FOR W=0 TO F                                                  <111>
05140 FOR CP=0 TO N                                                 <099>
05150 :IF A%(CP,4)=2 THEN 5210                                      <246>
05160 X1=A%(CP,0)+INT(((A%(CP,2)-A%(CP,0))*W/17)+.5
      )                                                             <247>
05170 Y1=A%(CP,1)+INT(((A%(CP,3)-A%(CP,1))*W/17)+.5
      )                                                             <016>
05180 IF A%(CP,4=0 THEN C=X1:D=Y1:GOSUB 1000                       <176>
05190 IF A%(CP,4)=1 THEN GOSUB 800                                  <216>
05200 X=X1:Y=Y1:NEXT                                                <116>
05210 CP=N+1:SYS MO                                                 <109>
05220 POKE ZP+2,W:SYS SA                                            <171>
05230 NEXT W:RETURN                                                 <206>
05990 :                                                             <124>
06000 PRINT "<HOME><14DOWN><2SPACE>ANIMASYON"                       <137>
06005 FOR W=0 TO F                                                  <224>
06010 POKE ZP+2,W:SYS LO                                            <111>
06030 NEXT                                                          <198>
06035 GET A$:IF A$=CHR$(13) THEN RETURN                             <105>
06040 FOR W=F TO 0 STEP -1                                          <126>
06050 POKE ZP+2,W:SYS LO                                            <151>
06070 NEXT                                                          <238>
06100 GOTO 6005                                                     <047>
```

```
 PROGRAM  : PIKCHA ML          1D49 1F52
-------------------------------------

1D49 : A5 F8 4A 4A 29 FE A8 B9  E7
1D51 : EC 1E 85 FC B9 EB 1E 85  CC
1D59 : FB A5 F8 29 07 A8 A5 FA  CC
1D61 : 29 07 AA A5 FA 29 F8 18  7A
1D69 : 65 FB 85 FB A5 FC 65 F9  78
1D71 : 85 FC 60 20 49 1D BD 1D  3F
1D79 : 1F 11 FB 91 FB 60 20 49  28
1D81 : 1D BD 25 1F 31 FB 91 FB  DB
1D89 : 60 A9 00 85 F9 85 FB A9  7E
1D91 : 20 85 FC A5 FA 0A 0A 0A  A4
1D99 : 18 69 40 85 FA A0 00 B1  3F
1DA1 : FB 91 F9 A9 00 91 FB E6  63
1DA9 : F9 E6 FB D0 F2 E6 FA E6  4E
1DB1 : FC A5 FC C9 28 D0 E8 60  66
1DB9 : A5 01 29 FE 85 01 A9 00  10
1DC1 : 85 F9 85 FB A9 20 85 FC  CF
```

```
1DC9 : A5 FA 0A 0A 0A 18 69 40  37
1DD1 : 85 FA A0 00 B1 F9 91 FB  25
1DD9 : E6 F9 E6 FB D0 F6 E6 FA  4B
1DE1 : E6 FC A5 FC C9 28 D0 EC  49
1DE9 : A5 01 09 01 85 01 60 A9  A7
1DF1 : 00 85 FB A9 20 85 FC A9  5D
1DF9 : C0 85 F9 A9 28 85 FA A0  0B
1E01 : 00 B1 FB 91 F9 A5 F9 18  F0
1E09 : 69 01 85 F9 A5 FA 69 00  6B
1E11 : 85 FA E6 FB D0 EB E6 FC  4E
1E19 : A5 FC C9 28 D0 E3 60 20  A2
1E21 : BD 1E 20 A2 1E 78 A9 51  39
1E29 : 8D 14 03 A9 1E 8D 15 03  5F
1E31 : A9 01 85 F7 8D 1A D0 AD  03
1E39 : 11 D0 29 7F 8D 11 D0 A9  E5
1E41 : A2 8D 12 D0 A9 FF 8D 19  4B
1E49 : D0 A9 00 8D 0E DC 58 60  8A
1E51 : A5 F7 C9 02 F0 24 AD 11  AD
1E59 : D0 29 DF 8D 11 D0 A9 15  D0
1E61 : 8D 18 D0 E6 F7 A9 81 8D  F9
1E69 : 19 D0 AD 11 D0 29 7F 8D  E7
1E71 : 11 D0 A9 31 8D 12 D0 4C  C0
1E79 : 31 EA AD 11 D0 09 20 8D  9E
1E81 : 11 D0 A9 1D 8D 18 D0 C6  73
1E89 : F7 A9 81 8D 19 D0 AD 11  58
1E91 : D0 29 7F 8D 11 D0 A9 A2  0B
1E99 : 8D 12 D0 68 A8 68 AA 68  BA
1EA1 : 40 A9 00 85 FB A9 20 85  FF
1EA9 : FC A0 00 A9 00 91 FB E6  75
1EB1 : FB D0 F8 E6 FC A5 FC C9  B4
1EB9 : 40 D0 F0 60 A9 00 85 FB  52
1EC1 : A9 04 85 FC A5 F9 0A 0A  D4
1EC9 : 0A 0A 05 F8 85 F8 A5 F8  E1
1ED1 : 91 FB A5 FB 18 69 01 85  24
1ED9 : FB A5 FC 69 00 85 FC C9  C7
1EE1 : 06 D0 EB A5 FB C9 30 D0  6F
1EE9 : E5 60 00 20 40 21 80 22  56
1EF1 : C0 23 00 25 40 26 80 27  6D
1EF9 : C0 28 00 2A 40 2B 80 2C  CA
1F01 : C0 2D 00 2F 40 30 80 31  28
1F09 : C0 32 00 34 40 35 80 36  85
1F11 : C0 37 00 39 40 3A 80 3B  E2
1F19 : C0 3C 00 3E 80 40 20 10  6A
1F21 : 08 04 02 01 7F BF DF EF  21
1F29 : F7 FB FD FE 78 A9 31 8D  32
1F31 : 14 03 A9 EA 8D 15 03 58  CD
1F39 : A9 01 8D 0E DC A9 15 8D  12
1F41 : 18 D0 AD 11 D0 29 DF 8D  40
1F49 : 11 D0 A9 00 8D 1A D0 60  DA
1F51 : FD 55 00 00 84 00 04 41  D4
```

Karakter Seti

Ekin Sökmen

Karakter editörü programı BASİC'ten ayrı KML ve KML2 adlı iki programa daha sahiptir. Bu iki program, kasetten ardarda yüklenecek şekilde kayıt edilmelidir. Programın kalanı kendi içinde açıklanmıştır.

```
00001 REM                                                          <197>
00002 POKE  650,128                                                <175>
00003 GOSUB 7500:GOSUB  6600                                       <201>
00004 POKE  792,226:POKE  793,252                                  <058>
00005 SYS  16820                                                   <022>
00006 DE=PEEK(18431)                                               <237>
00010 PRINT "<CLR>":FB=PEEK(251):FC=PEEK(252):K=0                  <001>
00011 POKE  251,0:POKE  252,96                                     <129>
00012 IF DE=8 THEN DE$="DISK":GOTO 15                              <251>
00013 IF DE=1 THEN DE$="KASET":GOTO 15                             <238>
00014 DE$="???"                                                    <077>
00015 PRINT "<2SPACE><CTRL-1><RVSON>KARAKTER SETI D
      EGISTIRME PROGRAMI";                                         <163>
00020 PRINT "<CTRL-1>":POKE  53280,12:POKE  53281,1
      2:PRINT "<RVSON>CIHAZ<2SPACE>:<RVSOFF> ";DE$:
      PRINT :PRINT                                                 <061>
00030 PRINT "<3SPACE><CTRL-8><RVSON>F1<CTRL-1><RVSO
      FF> INDEKSLI ARAMA VE DUZENLEME"                             <110>
00040 PRINT "<3SPACE><CTRL-8><RVSON>F3<CTRL-1><RVSO
      FF> ARAMA VE DUZENLEME"                                      <157>
00050 PRINT "<3SPACE><CTRL-8><RVSON>F5<CTRL-1><RVSO
      FF> DEGISTIRME"                                              <248>
00060 PRINT "<3SPACE><CTRL-8><RVSON>F7<CTRL-1><RVSO
      FF> TUM KARAKTERLERI SILME"                                  <100>
00070 PRINT "<3SPACE><CTRL-8><RVSON>F2<CTRL-1><RVSO
      FF> LOAD"                                                    <022>
00080 PRINT "<3SPACE><CTRL-8><RVSON>F4<CTRL-1><RVSO
      FF> SAVE"                                                    <062>
00081 PRINT "<3SPACE><CTRL-8><RVSON>F6<CTRL-1><RVSO
      FF> KOPYA"                                                   <140>
00082 PRINT "<3SPACE><CTRL-8><RVSON>F8<CTRL-1><RVSO
      FF> TAMPON"                                                  <171>
00083 PRINT "<3SPACE><CTRL-8><RVSON> R<CTRL-1><RVSO
                                                                   <185>
```

```
      FF> ROM'DAN RAM'A"
00084 PRINT "<3SPACE><CTRL-8><RVSON> D<CTRL-1><RVSO
      FF> CIHAZ DEGISTIRME":PRINT                    <119>
00085 PRINT "<3SPACE><CTRL-8><RVSON>RESTORE<CTRL-1>
      <RVSOFF> CIKIS"                                <098>
00090 PRINT :PRINT :PRINT                            <215>
00100 PRINT "<5SPACE><CTRL-2>EKIN SOFT SUNAR...<7SP
      ACE>":PRINT "<CTRL-1>"                         <048>
00110 GET TU$:IF TU$="" THEN GOTO 110                <075>
00115 T=ASC(TU$)                                     <255>
00116 POKE 198,0                                     <024>
00120 IF T=133 THEN GOTO 500                         <016>
00125 IF TU$="R" THEN GOTO 6300                      <080>
00126 IF TU$="D" THEN GOSUB 7000:GOTO 10             <165>
00130 IF T=135 THEN GOTO 1000                        <017>
00140 IF T=134 THEN GOTO 3500                        <203>
00160 IF T=137 THEN GOTO 2500                        <092>
00170 IF T=138 THEN GOTO 3000                        <195>
00175 IF T=136 THEN GOTO 4000                        <203>
00176 IF T=139 THEN GOTO 4500                        <117>
00177 IF T=140 THEN GOTO 5000                        <015>
00178 IF T=144 THEN PRINT "<CLR>":POKE 2060,32:PO
      KE 2061,32:POKE 808,237:LIST                   <026>
00180 GOTO 110                                       <124>
00500 PRINT "<CLR>":SYS 16944:POKE 198,0             <202>
00601 FB=PEEK(251):FC=PEEK(252)                      <150>
00605 RK=K-128:IF RK<0 THEN RK=0                     <162>
00610 PRINT "<9DOWN>KOD NO:";K                       <075>
00615 PRINT "INVERS KOD NO:";RK                      <077>
00620 POKE 1504,K:PRINT TAB(1)" _ KARAKTER"          <126>
00630 SYS 16480                                      <140>
00640 GET TU$:IF TU$="" THEN GOTO 640                <108>
00650 T=ASC(TU$):IF FB=0 AND FC=96 THEN GOTO 670
                                                     <021>
00651 IF FB=248 AND FC=111 THEN GOTO 751             <096>
00655 POKE 198,0                                     <055>
00660 IF T=44 THEN FB=FB-8:K=K-1:GOTO 860            <043>
00670 IF T=46 THEN FB=FB+8:K=K+1:GOTO 860            <141>
00720 IF T=88 THEN GOTO 10                           <098>
00730 IF T=133 THEN GOSUB 800                        <138>
00740 IF T=134 THEN GOSUB 830                        <045>
00741 IF T=135 THEN GOTO 6000                        <140>
00742 IF T=136 THEN GOTO 6200                        <030>
00745 IF T=20 THEN GOTO 900                          <073>
00746 IF T=95 THEN GOTO 6100                         <109>
00750 GOTO 640                                       <018>
00751 IF T=44 THEN FB=FB-8:K=K-1:GOTO 860            <134>
00752 GOTO 720                                       <252>
00800 AD=PEEK(251)+(PEEK(252)*256)-7                 <125>
00810 FOR I=0 TO 7:POKE 24566+I,PEEK(AD+I):NEXT
                                                     <192>
00820 GOTO 855                                       <026>
00830 AD=PEEK(251)+(PEEK(252)*256)-7                 <067>
```

```
00840 FOR I=0 TO 7:POKE AD+I,PEEK(24566+I):NEXT                    <133>
00845 DH=INT(AD/256):DL=AD-256*DH                                  <014>
00846 POKE 251,DL:POKE 252,DH                                      <166>
00850 POKE 53280,1:FOR QW=0 TO 100:NEXT QW:POKE
      53280,12:GOTO 500                                            <204>
00855 POKE 53280,1:FOR QW=0 TO 100:NEXT QW:POKE
      53280,12:RETURN                                              <148>
00860 IF FB=256 THEN FB=0:FC=FC+1:GOTO 880                         <089>
00870 IF FB<0 THEN FB=248:FC=FC-1:GOTO 880                         <218>
00880 IF K>255 THEN K=0                                            <206>
00885 IF K<0 THEN K=255                                            <101>
00895 POKE 251,FB:POKE 252,FC                                      <202>
00896 GOTO 500                                                     <094>
00900 PRINT "<HOME>"SPC(14)"JOYSTIK'I KULLANIN":X=0
      :Y=0:GOSUB 990                                               <092>
00901 PRINT TAB(14);"ATES<2SPACE>-DOLDURMA"                        <126>
00902 PRINT TAB(14);"DEL<3SPACE>-SILME"                            <195>
00903 PRINT TAB(14);"RETURN-BITIRME"                               <116>
00904 PRINT TAB(13);"<12SPACE>"                                    <215>
00905 PRINT TAB(13);"<12SPACE>"                                    <216>
00906 PRINT TAB(13);"<12SPACE>"                                    <217>
00907 PRINT TAB(13);"<12SPACE>"                                    <218>
00908 PRINT TAB(13);"<12SPACE>"                                    <219>
00920 J=PEEK(56320)                                                <149>
00921 POKE 198,0                                                   <067>
00930 IF J=126 THEN GOSUB 980:Y=Y-1:GOSUB 950                      <041>
00935 IF J=125 THEN GOSUB 980:Y=Y+1:GOSUB 950                      <171>
00940 IF J=123 THEN GOSUB 980:X=X-1:GOSUB 950                      <112>
00941 IF J=119 THEN GOSUB 980:X=X+1:GOSUB 950                      <050>
00942 IF J=111 THEN POKE 24565,122+128:GOSUB 98
      0:GOSUB 971                                                  <040>
00945 GET TU$:IF TU$="" THEN GOTO 920                              <158>
00946 T=ASC(TU$)                                                   <068>
00947 IF T=20 THEN POKE 24565,32:GOSUB 980:GOS
      UB 971                                                       <231>
00948 IF T=13 THEN GOTO 997                                        <018>
00949 GOTO 920                                                     <211>
00950 IF Y>7 THEN Y=7                                              <106>
00955 IF Y<0 THEN Y=0                                              <161>
00960 IF X>7 THEN X=7                                              <236>
00965 IF X<0 THEN X=0                                              <035>
00970 GOSUB 990:RETURN                                             <061>
00971 IF X>7 THEN X=0:Y=Y+1:IF Y>7 THEN X=0:Y
      =0                                                           <237>
00972 IF X<0 THEN X=7:Y=Y-1:IF Y<0 THEN X=7:Y
      =7                                                           <147>
00973 GOSUB 990:RETURN                                             <064>
00980 POKE 1065+X+Y*40,PEEK(24565)                                 <176>
00981 RETURN                                                       <021>
00990 POKE 24565,PEEK(1065+X+Y*40)                                 <050>
00991 POKE 1065+X+Y*40,32+128                                      <250>
```

```
00992 RETURN                                                    <032>
00995 IF  X>7  THEN  X=0:Y=Y+1:IF  Y>7  THEN  X=0:Y
      =0                                                        <005>
00996 GOSUB  990:RETURN                                         <087>
00997 FB=PEEK(251)-7:FC=PEEK(252):POKE  251,FB:POKE
        252,FC:GOSUB  980:SYS  16551                            <174>
00998 POKE  251,FB:POKE  252,FC:GOTO  500                       <125>
01000 PRINT "<CLR>":SYS  16610                                  <192>
01010 PRINT "F1...KARAKTER SETINI GORME & GERI DONM
      E"                                                        <197>
01020 PRINT "F3...KARAKTER SETINI KULLANMA"                     <141>
01025 PRINT "F5...KARAKTER SETINI KULLANMA & OLD"               <223>
01026 PRINT "F7...KARAKTER SETINI KULLANMA & CIKIS"
                                                                <220>
01030 GET  TU$:IF  TU$=""  THEN  GOTO  1030                     <118>
01040 T=ASC(TU$)                                                <164>
01050 IF  T=133  THEN  POKE  53272,24:POKE  56576,1
      48:POKE  648,196:PRINT "<CLR>":GOTO  1100                 <022>
01060 IF  T=134  THEN  POKE  53272,24:POKE  56576,1
      48:POKE  648,196:PRINT "<CLR>":GOTO  1200                 <225>
01065 IF  T=135  THEN  POKE  53272,24:POKE  56576,1
      48:POKE  648,196:PRINT "<CLR>":GOTO  1300                 <166>
01066 IF  T=136  THEN  POKE  53272,24:POKE  56576,1
      48:POKE  648,196:PRINT "<CLR>":NEW                        <128>
01070 GOTO  1030                                                <090>
01100 FOR  I=0  TO  255:POKE  (256*196)+I,I:NEXT                <067>
01110 WAIT  197,60                                              <000>
01120 POKE  53272,21:POKE  56576,151:POKE  648,4                <009>
01130 GOTO  10                                                  <036>
01200 PRINT "<CLR>KARAKTER SETINI KULLANABILIRSINIZ
      "                                                         <230>
01205 PRINT "CTRL-_ ILE GERI DONEBILIRSINIZ"                    <160>
01210 POKE  2050,0:POKE 28672,0:POKE 808,237:POKE
      43,1:POKE  44,112:NEW                                     <193>
01300 PRINT "<CLR>KARAKTER SETINI KULLANABILIRSINIZ
      "                                                         <076>
01305 PRINT "CTRL-_ ILE GERI DONEBILIRSINIZ"                    <006>
01306 POKE  2050,0:POKE 28672,0:POKE 808,237:SYS  1
      6851:END                                                  <253>
01500 PRINT "<CLR>OK":SYS  16610:GOTO  10                       <171>
02500 PRINT "<CLR>":INPUT "DOSYA ADI";D$                        <167>
02510 U=LEN(D$):POKE  16655,U                                   <152>
02520 FOR  I=1  TO  U                                           <094>
02530 POKE  16704+I,ASC(MID$(D$,I,1))                           <247>
02540 NEXT                                                      <008>
02550 SYS  16645                                                <219>
02560 PRINT "<CLR>OK":GOTO  10                                  <034>
03000 PRINT "<CLR>":INPUT "DOSYA ADI";D$                        <159>
03010 U=LEN(D$):POKE  16679,U                                   <018>
03020 FOR  I=1  TO  U                                           <086>
03030 POKE  16704+I,ASC(MID$(D$,I,1))                           <239>
03040 NEXT                                                      <000>
03050 SYS  16669                                                <085>
```

```
03060 PRINT "<CLR>OK":GOTO  10                                    <024>
03500 KN=1919:PRINT "<CLR>":INPUT "KOD NO";KN                     <125>
03501 IF KN=1919 THEN GOTO 6500                                   <043>
03505 IF KN>511 THEN GOTO 3500                                    <246>
03510 FA=KN*8:AR=FA+24576                                         <213>
03515 IF  KN>255  THEN  K=KN-256                                  <004>
03516 IF  KN<=255  THEN  K=KN                                     <059>
03520 HI=INT(AR/256):LO=AR-(HI*256)                               <017>
03530 POKE  251,LO:POKE  252,HI:GOTO  500                         <140>
04000 PRINT "<CLR>DELETING ..."                                   <238>
04010 SYS  16780                                                  <058>
04020 GOTO  10                                                    <132>
04500 PRINT "<CLR>":INPUT "ILK KOD NO";IK                         <139>
04510 INPUT "SON KOD NO";SK                                       <201>
04520 INPUT "KOPYA KOD NO";CK                                     <079>
04521 IF  (SK-IK)+1>511-CK THEN  GOTO 4500                        <041>
04530 IS=IK*8:IE=IS+24576                                         <017>
04540 SS=SK*8:SE=SS+24576+7                                       <015>
04550 CS=CK*8:CE=CS+24576                                         <115>
04555 PRINT "<CLR>KOPYALIYOR..."                                  <146>
04560 HI=INT(IE/256):LI=IE-(HI*256)                               <210>
04570 HS=INT(SE/256):LS=SE-(256*HS)                               <136>
04580 HC=INT(CE/256):LC=CE-(256*HC)                               <058>
04590 POKE  16899,LI:POKE  16900,HI                               <227>
04600 POKE  16902,LC:POKE  16903,HC                               <214>
04610 POKE  16905,LS:POKE  16924,HS                               <168>
04620 SYS  16896                                                  <006>
04630 GOTO  10                                                    <236>
05000 PRINT "<CLR>":PRINT :PRINT :PRINT                           <029>
05010 PRINT "<5SPACE>F1 - TAMPON1'E KOPYA"                        <133>
05020 PRINT "<5SPACE>F3 - TAMPON2'YE KOPYA"                       <140>
05040 PRINT "<5SPACE>F2 - TAMPON1'DEN KOPYA"                      <016>
05050 PRINT "<5SPACE>F4 - TAMPON2'DEN KOPYA"                      <122>
05070 PRINT "<5SPACE>X<2SPACE>- CIKIS"                            <068>
05080 GET  TU$:IF  TU$=""  THEN  GOTO  5080                       <126>
05090 T=ASC(TU$)                                                  <148>
05110 IF  T=133  THEN  TH=128:SH=144:GOSUB  5500                  <094>
05120 IF  T=134  THEN  TH=144:SH=160:GOSUB  5500                  <202>
05140 IF  T=137  THEN  RH=128:SH=112:GOSUB  5600                  <014>
05150 IF  T=138  THEN  RH=144:SH=112:GOSUB  5600                  <216>
05151 IF  TU$="X"  THEN  RUN                                      <059>
05160 GOTO  5080                                                  <053>
05500 PRINT "<CLR>KOPYALIYOR..."                                  <075>
05510 POKE  16976,TH:POKE  16990,SH:POKE  16973,96                <085>
05520 SYS  16969                                                  <112>
05530 GOTO  5000                                                  <168>
05600 PRINT "<CLR>KOPYALIYOR..."                                  <175>
05610 POKE  16973,RH:POKE  16976,96:POKE  16990,SH                <003>
05620 SYS  16969                                                  <212>
05630 GOTO  5000                                                  <012>
06000 AD=PEEK(251)+PEEK(252)*256-7                                <183>
06005 POKE 198,0                                                  <071>
06010 FOR  I=0  TO  7:POKE  AD+I,PEEK(AD+I) OR PEEK
```

```
      (24566+I):NEXT :I=0:POKE 198,0                          <127>
06020 DH=INT(AD/256):DL=AD-256*DH                             <109>
06030 POKE  251,DL:POKE  252,DH                               <014>
06035 FOR QW=0 TO 50:POKE 198,0:NEXT QW                       <190>
06040 GOTO 500                                                <158>
06100 AD=PEEK(251)+PEEK(252)*256-7                            <027>
06110 FOR  I=0  TO  7:POKE  AD+I,0:NEXT                       <022>
06120 DH=INT(AD/256):DL=AD-256*DH                             <209>
06130 POKE  251,DL:POKE  252,DH                               <114>
06140 GOTO 500                                                <002>
06200 AD=PEEK(251)+PEEK(252)*256-7                            <129>
06210 FOR  I=0  TO  7:POKE  AD+I,255-PEEK(AD+I):NEX
      T                                                       <072>
06220 DH=INT(AD/256):DL=AD-256*DH                             <055>
06230 POKE  251,DL:POKE  252,DH                               <216>
06240 GOTO 500                                                <104>
06300 PRINT "<CLR>KOPYALIYOR...":SYS 17004                    <206>
06310 PRINT "<3SPACE>TAMAM...":GOTO 10                        <018>
06500 INPUT "<CLR>INVERS KOD NO";KN                           <090>
06510 KN=KN+128                                               <048>
06520 GOTO  3505                                              <015>
06600 FOR  I=1 TO 5:DK(I)=PEEK(18431+I):NEXT                  <173>
06610 IF  DK(1)=77 AND DK(2)=76 AND DK(3)=79 AND DK
      (4)=75 THEN  RETURN                                     <017>
06615 POKE 20993,DE                                           <210>
06620 POKE 147,0:SYS 57812"KML",DE,1:SYS 62631                <128>
06625 POKE 147,0:SYS 57812"KML2",DE,1:SYS 62631               <251>
06626 POKE 18431,PEEK(20993)                                  <132>
06630 RETURN                                                  <082>
07000 PRINT "<CLR>";"HANGI CIHAZ":POKE 198,0                  <243>
07010 PRINT :PRINT "F1-DISK"                                  <065>
07020 PRINT "F3-KASET"                                        <147>
07030 GET TU$:IF TU$="" THEN GOTO 7030                        <026>
07035 TU=ASC(TU$)                                             <036>
07040 IF TU=133 THEN POKE 18431,8:DE=8:POKE 16648,8
      :POKE 16672,8:RETURN                                    <009>
07050 IF TU=134 THEN POKE 18431,1:DE=1:POKE 16648,1
      :POKE 16672,1:RETURN                                    <185>
07060 GOTO 7030                                               <030>
07500 IF PEEK(18431)=8 THEN GOTO 7520                         <053>
07510 IF PEEK(18431)<>1 THEN GOSUB 7000                       <066>
07520 RETURN                                                  <212>
```

PROGRAM : KML 4000.42 B0

```
4000 : A9 80 8D F0 CF A2 00 A0  BE
4008 : 00 B1 FB 2D F0 CF CD F0  2C
4010 : CF D0 0E A9 FA 9D 41 05  AC
4018 : E8 4E F0 CF E0 08 D0 E7  BF
4020 : 60 A9 20 9D 41 05 E8 4E  8D
4028 : F0 CF E0 08 D0 D9 60 A9  EA
4030 : 80 8D F1 CF A9 00 A0 00  0A
```

```
4038 : A9 00 91 FB A2 00 A0 00  72
4040 : BD 41 05 C9 FA D0 10 B1  F2
4048 : FB 0D F1 CF 91 FB E8 4E  79
4050 : F1 CF E0 08 D0 E8 60 E8  0A
4058 : 4E F1 CF E0 08 D0 DF 60  F6
4060 : A9 29 8D 16 40 8D 24 40  45
4068 : A9 04 8D 17 40 8D 25 40  DF
4070 : 20 00 40 A2 00 18 AD 16  98
4078 : 40 69 28 B0 1C 8D 16 40  94
4080 : 8D 24 40 18 A5 FB 69 01  14
4088 : B0 18 85 FB 8A 48 20 00  91
4090 : 40 68 AA E8 E0 07 D0 DD  11
4098 : 60 EE 17 40 EE 25 40 4C  BF
40A0 : 7D 40 E6 FC 4C 8A 40 A9  04
40A8 : 29 8D 41 40 A9 04 8D 42  66
40B0 : 40 20 2F 40 A2 00 18 AD  BA
40B8 : 41 40 69 28 B0 19 8D 41  05
40C0 : 40 18 A5 FB 69 01 B0 15  81
40C8 : 85 FB 8A 48 20 2F 40 68  44
40D0 : AA E8 E0 07 D0 E0 60 EE  7B
40D8 : 42 40 4C BE 40 E6 FC 4C  ED
40E0 : C8 40 A2 00 BD 00 60 9D  0A
40E8 : 00 E0 E8 D0 F7 EE E6 40  BF
40F0 : EE E9 40 AD E9 40 C9 F0  42
40F8 : D0 E8 A9 60 8D E6 40 A9  17
4100 : E0 8D E9 40 60 A9 01 A2  C6
4108 : 08 A0 FF 20 BA FF A9 0E  D3
4110 : A2 41 A0 41 20 BD FF A9  E6
4118 : 00 20 D5 FF 60 A9 01 A2  3A
4120 : 08 A0 FF 20 BA FF A9 00  CE
4128 : A2 41 A0 41 20 BD FF A9  FE
4130 : 00 85 AC A9 60 85 AD A9  8F
4138 : AC A2 00 A0 70 20 D8 FF  B5
4140 : 60 54 55 52 4B 43 45 2D  A8
4148 : 44 45 55 54 53 43 48 FF  7F
4150 : FF 00 FF 00 FF 00 FF 00  4F
4158 : FF 00 EA EA 20 A6 41 A9  FF
4160 : 15 8D 18 D0 A9 97 8D 00  E9
4168 : DD A9 04 8D 88 02 A9 06  18
4170 : 85 C6 A9 93 8D 77 02 A9  25
4178 : 52 8D 78 02 A9 55 8D 79  5E
4180 : 02 A9 4E 8D 7A 02 A9 0D  15
4188 : 8D 7B 02 60 A2 00 A9 00  30
4190 : 9D 00 60 E8 D0 F8 EE 92  18
4198 : 41 AD 92 41 C9 70 D0 EC  BA
41A0 : A9 60 8D 92 41 60 A9 01  EF
41A8 : 85 2B A9 08 85 2C A9 08  9F
41B0 : 8D 02 08 60 A9 C0 8D 14  4B
41B8 : 03 A9 41 8D 15 03 58 60  1D
41C0 : A9 04 CD 8D 02 D0 09 A9  AE
41C8 : 39 C5 C5 D0 03 20 5A 41  8C
41D0 : 4C 31 EA A9 01 85 2B A9  E1
41D8 : 70 85 2C A9 FF A0 01 91  77
```

```
41E0 : 2B 20 33 A5 A5 22 18 69  3B
41E8 : 02 85 2D A5 23 69 00 85  35
41F0 : 2E 20 5E A6 A9 01 85 2B  AA
41F8 : A9 70 85 2C 60 EA EA EA  9F
4200 : A2 00 BD 00 60 9D 00 60  C5
4208 : E0 00 F0 0C E8 D0 F3 EE  69
4210 : 04 42 EE 07 42 4C 00 42  DD
4218 : AD 04 42 C9 60 D0 ED A9  29
4220 : 60 8D 04 42 8D 07 42 A9  FE
4228 : 00 8D 03 42 8D 06 42 60  CB
4230 : A2 00 BD 00 50 9D 00 04  3C
4238 : E8 D0 F7 A2 00 BD 00 51  6B
4240 : 9D 00 05 E8 E0 80 D0 F5  7D
4248 : 60 A2 00 BD 00 60 9D 00  2B
4250 : 70 E8 D0 F7 EE 4D 42 EE  A8
4258 : 50 42 AD 50 42 C9 70 D0  15
4260 : E8 A9 60 A2 70 8D 4D 42  B6
4268 : 8E 50 42 60 78 EA EA EA  1B
4270 : A9 33 85 01 A2 00 BD 00  55
4278 : D0 9D 00 60 E8 D0 F7 EE  F6
4280 : 78 42 EE 7B 42 AD 7B 42  48
4288 : C9 70 D0 E8 A9 60 8D 7B  A5
4290 : 42 A9 D0 8D 78 42 A9 37  3B
4298 : 85 01 58 60 00 00 00 00  C0
42A0 : 00 00 00 00 00 00 00 00  A1
42A8 : 00 00 00 00 00 00 00 00  A9
```

```
PROGRAM  : KML2                 5000 5200
-----------------------------------------

5000 : 70 43 43 43 43 43 43 43  2D
5008 : 43 6E 20 20 20 20 20 20  52
5010 : 3C 2D 07 05 12 09 20 20  70
5018 : 20 20 20 20 20 20 20 20  18
5020 : 20 20 20 20 20 20 20 20  20
5028 : 42 20 20 20 20 20 20 20  4A
5030 : 20 42 20 20 20 20 20 20  41
5038 : 3E 2D 09 0C 05 12 09 20  16
5040 : 20 20 20 20 20 20 20 20  40
5048 : 20 20 20 20 20 20 20 20  48
5050 : 42 20 20 20 20 20 20 20  72
5058 : 20 42 20 20 20 20 20 20  69
5060 : 18 2D 05 18 09 14 20 20  45
```

```
5068 : 20 20 20 20 20 20 20 20  68
5070 : 20 20 20 20 20 20 20 20  70
5078 : 42 20 20 20 20 20 20 20  9A
5080 : 20 42 20 20 20 20 20 06  5D
5088 : 31 2D 10 15 13 08 20 20  29
5090 : 20 20 20 20 20 20 20 20  90
5098 : 20 20 20 20 20 20 20 20  98
50A0 : 42 20 20 20 20 20 20 20  C2
50A8 : 20 42 20 20 20 20 20 06  85
50B0 : 33 2D 10 15 0C 0C 20 20  03
50B8 : 20 20 20 20 20 20 20 20  B8
50C0 : 20 20 20 20 20 20 20 20  C0
50C8 : 42 20 20 20 20 20 20 20  EA
50D0 : 20 42 20 20 20 09 0E 13  C6
50D8 : 14 2D 05 04 09 14 20 20  37
50E0 : 20 20 20 20 20 20 20 20  E0
50E8 : 20 20 20 20 20 20 20 20  E8
50F0 : 42 20 20 20 20 20 20 20  12
50F8 : 20 42 20 20 20 1F 2D 13  1B
5100 : 09 0C 20 20 20 20 20 20  DF
5108 : 20 20 20 20 20 20 20 20  08
5110 : 20 20 20 20 20 20 20 20  10
5118 : 42 20 20 20 20 20 20 20  3A
5120 : 20 42 20 20 20 06 35 2D  CF
5128 : 10 15 13 08 26 0F 12 20  EC
5130 : 20 20 20 20 20 20 20 20  30
5138 : 20 20 20 20 20 20 20 20  38
5140 : 42 20 20 20 20 20 20 20  62
5148 : 20 42 20 20 20 06 37 2D  FF
5150 : 09 0E 16 05 12 14 20 20  09
5158 : 20 20 20 20 20 20 20 20  58
5160 : 20 20 20 20 20 20 20 20  60
5168 : 6D 43 43 43 43 43 43 43  92
5170 : 43 7D 20 20 20 20 20 20  42
5178 : 20 20 20 20 20 20 20 20  78
5180 : 20 20 20 20 20 20 20 20  80
5188 : 20 20 20 20 20 20 20 20  88
5190 : 20 20 20 20 20 20 20 20  90
5198 : 20 20 20 20 20 20 20 20  98
51A0 : 20 20 20 20 20 20 20 20  A0
51A8 : 20 20 20 20 20 20 20 20  A8
51B0 : 20 20 20 20 20 20 20 20  B0
51B8 : 20 20 20 20 20 20 20 20  B8
51C0 : 20 20 20 20 20 20 20 20  C0
51C8 : 20 20 20 20 20 20 20 20  C8
51D0 : 20 20 20 20 20 20 20 20  D0
51D8 : 20 20 20 20 20 20 20 20  D8
51E0 : 20 20 20 20 20 20 20 20  E0
51E8 : 20 20 20 20 20 20 20 20  E8
51F0 : 20 20 20 20 20 20 20 20  F0
51F8 : 20 20 20 20 20 20 20 20  F8
```

Türk Paint

Hakan Arıbaş

Commodore 64'ün grafik yetenekleri (özellikleri) oldukça iyi olmasına rağmen bu özellikleri kullanacak komutlara sahip değil. Ancak "POKE" ve "PEEK" komutları arasında boğularak kullanılabilen bu özelliklere TURK PAINT ile sadece birer SYS komutu kullanarak ulaşabilirsiniz. TURK PAINT, Commodore 64'ün 320×200 çözünürlüklü grafik modu için küçük çapta bir grafik paket programıdır. Commodore 64'e beş yeni komut kazandırır. Bu komutlar:

ENTER: HI-RES (yüksek çözünürlük) moduna girme:

PAINT: Ekranı istenilen renkle boyama (ENTER'dan sonra kullanılmalı, önce değil)

POINT: Ekranın istenilen koordinatına nokta koyma (parametresi 1) veya istenilen bir koordinattaki noktayı silme (parametresi 0)

CLEAR: Grafik ekranını temizleme veya değişik lineer desenlerle doldurma (ekranı temizlemek için parametre 0)

EXIT: HI-RES grafik modundan çıkma.

Programı çalıştırdığınızda bu komutların kullanım formatları ve parametre limitleri hakkındaki bilgiler ekranda gösterildiğinde burada saymaya gerek duymuyorum. (Örneğin POINT komutu için SYS49152, A, X, Y. A nokta koyma (1) veya nokta silme (0), X, Y ekranı koordinatları gibi...). Tüm C-64'çülere bol grafikli günler.

Türk Paint Demo programı kullanılarak yazılan bu demo, iki boyutlu bir ekrana üç boyutlu bir grafik çizmeye başlar (bu grafik, rüzgarda dalgalanan bir mendile benziyor). Grafiğin temeli matematiksel fonksiyonlara dayandığından, programın başındaki fonksiyonu değiştirerek görüntüler elde edebilirsiniz.

```
PROGRAM  : TURK PAINT          0801 0D4A
-----------------------------------------

0801 : 1E 08 C8 07 9E 32 30 38  E3
0809 : 30 3A 8F 20 20 54 55 52  DD
0811 : 4B 20 50 41 49 4E 54 20  41
0819 : 56 31 2E 30 00 00 00 A2  DF
0821 : 00 BD 43 08 9D 00 C0 E8  80
0829 : D0 F7 EE 24 08 EE 27 08  DA
0831 : AC 27 08 C0 C6 D0 EA A2  6F
0839 : 00 8E 01 08 8E 02 08 4C  73
0841 : 82 C1 20 FD AE 20 9E B7  41
0849 : 8E 44 03 20 FD AE 20 9E  D1
0851 : B7 86 FB 86 FD 20 FD AE  51
0859 : 20 9E B7 86 FC 86 FE A2  CC
0861 : 00 46 FD 46 FE E8 E0 03  8D
0869 : D0 F7 A5 FC 29 07 8D 3C  B7
0871 : 03 A2 00 8E 3D 03 8C 3E  32
0879 : 03 A5 FD 8D 3F 03 A2 00  16
0881 : 0E 3F 03 E8 E0 03 D0 F8  68
0889 : A6 FE E0 00 D0 0B A2 00  D6
```

```
0891 : 8E 40 03 8E 41 03 4C 7F  2E
0899 : C0 A2 40 A0 01 8E 40 03  5A
08A1 : 8C 41 03 A2 00 E8 E4 FE  BC
08A9 : F0 17 18 AD 40 03 69 40  23
08B1 : B0 09 8D 40 03 EE 41 03  04
08B9 : 4C 63 C0 EE 41 03 4C 70  03
08C1 : C0 18 A2 00 A0 20 8E 3D  F6
08C9 : 03 8C 3E 03 AD 40 03 6D  C6
08D1 : 3F 03 B0 16 18 6D 3C 03  65
08D9 : B0 16 8D 3D 03 18 AD 3E  C4
08E1 : 03 6D 41 03 8D 3E 03 4C  BB
08E9 : B4 C0 EE 3E 03 4C 92 C0  DF
08F1 : EE 3E 03 4C 98 C0 38 A5  04
08F9 : FB 29 07 8D 42 03 A9 07  ED
0901 : ED 42 03 8D 42 03 A9 01  67
0909 : 8D 43 03 A2 00 EC 42 03  C3
0911 : F0 07 0E 43 03 E8 4C CB  B1
0919 : C0 AE 3D 03 AC 3E 03 8E  C6
0921 : EA C0 8C EB C0 8E FA C0  FA
0929 : 8C FB C0 AD FF FF 8D 45  59
0931 : 03 AE 44 03 E0 01 D0 07  64
0939 : 0D 43 03 8D FF FF 60 18  0C
0941 : A9 FE ED 43 03 69 01 2D  27
0949 : 45 03 4C F9 C0 20 44 E5  4C
0951 : A2 1D A0 3B 8E 18 D0 8C  17
0959 : 11 D0 60 20 FD AE 20 9E  01
0961 : B7 8E 2D C1 A2 00 A0 04  98
0969 : 8E 31 C1 8C 32 C1 A9 FF  6A
0971 : A2 00 9D FF FF E8 AC 32  D9
0979 : C1 C0 07 F0 0A E0 00 D0  C4
0981 : F1 EE 32 C1 4C 30 C1 E0  BD
0989 : F8 D0 E7 60 20 FD AE 20  DC
0991 : 9E B7 8E 5E C1 A2 00 A0  ED
0999 : 20 8E 62 C1 8C 63 C1 A9  0F
09A1 : FF A2 00 9D FF FF E8 E0  0A
09A9 : 00 D0 F8 EE 63 C1 AC 63  EB
09B1 : C1 C0 40 D0 EE 60 20 44  F7
09B9 : E5 A2 15 A0 1B 8E 18 D0  71
09C1 : 8C 11 D0 60 A2 01 8E 86  8F
09C9 : 02 20 5E A6 A2 06 8E 20  1D
09D1 : D0 8E 21 D0 A2 15 A0 00  A0
09D9 : 18 20 F0 FF A2 00 BD BF  DE
09E1 : C1 9D 00 04 E8 D0 F7 EE  C4
09E9 : 9E C1 EE A1 C1 AC A1 C1  E3
09F1 : C0 08 D0 EA A2 00 A9 20  58
09F9 : 9D 48 07 E8 E0 A0 D0 F8  E1
0A01 : 60 20 20 20 20 20 20 20  41
0A09 : 20 20 20 55 40 40 40 40  74
0A11 : 40 40 40 40 40 40 40 40  11
0A19 : 40 40 40 40 40 49 20 20  A1
0A21 : 20 20 20 20 20 20 20 20  21
0A29 : 20 20 20 20 20 20 20 20  29
0A31 : 20 20 20 5D 20 14 15 12  30
```

```
0A39 : 0B 20 10 01 09 0E 14 20  0A
0A41 : 16 31 2E 30 20 5D 20 20  2F
0A49 : 20 20 20 20 20 20 20 20  49
0A51 : 20 20 20 20 20 20 20 20  51
0A59 : 20 20 20 4A 40 40 40 40  62
0A61 : 40 40 40 40 40 40 40 40  61
0A69 : 40 40 40 40 40 4B 20 20  01
0A71 : 20 20 20 20 20 20 20 20  71
0A79 : 20 20 20 55 40 40 40 40  E4
0A81 : 40 40 40 40 40 40 40 40  81
0A89 : 40 40 40 40 40 40 40 40  89
0A91 : 40 40 40 40 40 40 40 40  91
0A99 : 40 40 40 40 40 40 49 20  7D
0AA1 : 20 20 20 5D 20 05 0E 14  10
0AA9 : 05 12 20 20 2E 2E 2E 2E  2D
0AB1 : 2E 2E 2E 2E 20 20 13 19  C9
0AB9 : 13 20 34 39 34 31 39 20  03
0AC1 : 20 20 20 20 20 20 5D 20  B6
0AC9 : 20 20 20 5D 20 20 20 20  71
0AD1 : 20 20 20 20 20 20 20 20  D1
0AD9 : 20 20 20 20 20 20 20 20  D9
0AE1 : 20 20 20 20 20 20 20 20  E1
0AE9 : 20 20 20 20 20 20 5D 20  DE
0AF1 : 20 20 20 5D 20 10 01 09  6E
0AF9 : 0E 14 20 20 2E 2E 2E 2E  87
0B01 : 2E 2E 2E 2E 20 20 13 19  19
0B09 : 13 20 34 39 34 33 33 2C  63
0B11 : 01 20 20 20 20 20 5D 20  E7
0B19 : 20 20 20 5D 20 20 20 20  C1
0B21 : 20 20 20 20 20 20 20 20  21
0B29 : 20 20 20 20 20 20 20 20  29
0B31 : 20 20 20 20 20 20 20 20  31
0B39 : 20 20 20 20 20 20 5D 20  2E
0B41 : 20 20 20 5D 20 03 0C 05  79
0B49 : 01 12 20 20 2E 2E 2E 2E  C9
0B51 : 2E 2E 2E 2E 20 20 13 19  69
0B59 : 13 20 34 39 34 38 32 2C  D7
0B61 : 02 20 20 20 20 20 5D 20  38
0B69 : 20 20 20 5D 20 20 20 20  11
0B71 : 20 20 20 20 20 20 20 20  71
0B79 : 20 20 20 20 20 20 20 20  79
0B81 : 20 20 20 20 20 20 20 20  81
0B89 : 20 20 20 20 20 20 5D 20  7E
0B91 : 20 20 20 5D 20 10 0F 09  46
0B99 : 0E 14 20 20 2E 2E 2E 2E  27
0BA1 : 2E 2E 2E 2E 20 20 13 19  B9
0BA9 : 13 20 34 39 31 35 32 2C  DE
0BB1 : 03 2C 18 2C 19 20 5D 20  9E
0BB9 : 20 20 20 5D 20 20 20 20  61
0BC1 : 20 20 20 20 20 20 20 20  C1
0BC9 : 20 20 20 20 20 20 20 20  C9
0BD1 : 20 20 20 20 20 20 20 20  D1
0BD9 : 20 20 20 20 20 20 5D 20  CE
```

```
0BE1 : 20 20 20 5D 20 05 18 09  62
0BE9 : 14 20 20 20 2E 2E 2E 2E  83
0BF1 : 2E 2E 2E 2E 20 20 13 19  09
0BF9 : 13 20 34 39 35 32 34 20  47
0C01 : 20 20 20 20 20 20 5D 20  F6
0C09 : 20 20 20 4A 40 40 40 40  12
0C11 : 40 40 40 40 40 40 40 40  11
0C19 : 40 40 40 40 40 40 40 40  19
0C21 : 40 40 40 40 40 40 40 40  21
0C29 : 40 40 40 40 40 40 4B 20  15
0C31 : 20 20 20 55 40 40 40 40  9C
0C39 : 40 40 40 40 40 40 40 40  39
0C41 : 40 40 40 40 49 20 55 40  25
0C49 : 40 40 40 40 40 40 40 40  49
0C51 : 40 40 40 40 40 40 49 20  35
0C59 : 20 20 20 5D 20 01 20 2E  24
0C61 : 2E 2E 2E 20 28 30 2D 32  53
0C69 : 35 35 29 20 5D 20 5D 17  02
0C71 : 12 09 14 14 05 0E 20 02  D5
0C79 : 19 20 20 20 20 20 5D 20  67
0C81 : 20 20 20 5D 20 02 20 2E  54
0C89 : 2E 2E 2E 20 28 30 2D 32  7B
0C91 : 35 35 29 20 5D 20 5D 20  3C
0C99 : 20 20 20 20 20 20 20 20  99
0CA1 : 20 20 20 20 20 20 5D 20  96
0CA9 : 20 20 20 5D 20 03 20 2E  84
0CB1 : 2E 2E 2E 20 28 30 2D 31  A1
0CB9 : 29 20 20 20 5D 20 5D 20  8B
0CC1 : 20 08 01 0B 01 0E 20 01  8A
0CC9 : 12 09 02 01 24 20 5D 20  FA
0CD1 : 20 20 20 5D 20 18 20 2E  55
0CD9 : 2E 2E 2E 20 28 30 2D 32  CB
0CE1 : 35 35 29 20 5D 20 5D 20  8C
0CE9 : 20 20 20 20 20 20 20 20  E9
0CF1 : 2E 20 20 2E 20 20 5D 20  B6
0CF9 : 20 20 20 5D 20 19 20 2E  85
0D01 : 2E 2E 2E 20 28 30 2D 32  F3
0D09 : 30 30 29 20 5D 20 5D 20  2C
0D11 : 20 20 20 31 39 39 31 20  D2
0D19 : 09 1A 0D 09 12 20 5D 20  6C
0D21 : 20 20 20 4A 40 40 40 40  2A
0D29 : 40 40 40 40 40 40 40 40  29
0D31 : 40 40 40 40 4B 20 4A 40  09
0D39 : 40 40 40 40 40 40 40 40  39
0D41 : 40 40 40 40 40 40 4B 20  2D
0D49 : 20 85 FF 20 4E B1 A9 20  89
```

PROGRAM ADI : TURK PAINT DEMO

```
00100 REM  ---------------------------                    <209>
00110 REM   TURK PAINT V1.0 DEMO                           <095>
00120 REM                                                  <182>
00130 REM    WRITTEN BY HAKAN ARIBAS                       <145>
00140 REM     1991  NARLIDERE/IZMIR                        <116>
00150 REM      ISTIHKAN LOJ.                               <127>
00160 REM       GUL-2 APT.                                 <253>
00170 REM        DAIRE:3 35325                             <088>
00180 REM         NARLIDERE/IZMIR                          <254>
00190 REM  ---------------------------                    <043>
00200 :                                                    <176>
00210 DEF FNA(X)=1/COS(X)                                  <178>
00220 DEF FNA(Y)=SIN(Y)+1.1                                <124>
00230 SYS 49419:SYS 49433,3:SYS 49482,0                    <043>
00240 PO=49152:A=.25:B=7.75:FOR Y=0 TO 8 STEP .25:X
      =0                                                   <029>
00250 X2=16*(Y+X):Y2=-(Y-X+2+FNA(X)*FNA(Y))*6+150:S
      YS PO,1,X2,Y2                                        <207>
00260 FOR X=A TO B STEP A:X1=16*(Y+X):Y1=-(Y-X+2+FN
      A(X)*FNA(Y))*6+150                                   <231>
00270 M=ABS((Y2-Y1)/(X2-X1))                               <030>
00280 IY=1:IF Y2>Y1 THEN IY=-1                             <204>
00290 IX=1:IF X2>X1 THEN IX=-1                             <069>
00300 Y2=Y2-M*IY:FOR J=X2 TO X1 STEP IX:Y2=Y2+M*IY:
      SYS PO,1,J,Y2:NEXT J:X2=X1:Y2=Y1                     <056>
00310 NEXT X,Y:Y=1:SYS 49433,67                            <071>
00320 GET A$:IF A$="" THEN 320                             <131>
00330 SYS 49524:END                                        <129>
```

New Tetris

Phobia

Bir tür Tetris olan bu oyunda toplamları 9'a tamamlayacak şekilde rakamları üstüste getirmeniz gerekiyor. Örneğin 4 ve 5 veya 9 ve 0 üstüste gelince ikisi de yok olacaktır. rakamları sağa sola oynatmak için kursor tuşlarını kullanmanız gerekiyor.

Kursor sağ/sol - Sağ.
Kursor yukarı/aşağı - Sol.

```
PROGRAM ADI : NEW TETRIS

00005 POKE 53281,0:POKE 53280,0:POKE 774,226:POKE 7
      75,252:GOSUB 5000:GOSUB 1000                    <249>
00007 PRINT "<CTRL-8><CLR>"CHR$(8)                    <128>
00008 FOR N=1238 TO 1744 STEP 40:POKE N,66:NEXT :FO
      R N=1249 TO 1744 STEP 40:POKE N,66:NEXT         <192>
00010 FOR N=1718 TO 1728:POKE N,67:NEXT :POKE 1729,
      75:POKE 1718,74                                 <203>
00012 B=150:GOSUB 110:GOSUB 100                       <168>
00015 R=INT(RND(1)*(10-0)+0):Y=1083:POKE 198,0        <075>
00016 IF PEEK(Y)<>32 THEN 300                         <133>
00017 POKE Y-40,32:POKE Y,R+48:Y=Y+40                 <121>
00019 FOR N=0 TO B:NEXT :IF PEEK(Y)<>32 THEN 52       <195>
00021 GET A$:IF A$="" THEN 17                         <063>
00023 IF A$="<RIGHT>" THEN 30                         <187>
00025 IF A$="<DOWN>" THEN 35                          <223>
00028 GOTO 17                                         <062>
00030 IF PEEK(Y+1)<>32 THEN 17                        <062>
00031 POKE Y-40,32:Y=Y+1:POKE Y,R+48 :GOTO 17         <038>
00035 IF PEEK(Y-1)<>32 THEN 17                        <131>
00036 POKE Y-40,32:Y=Y-1:POKE Y,R+48:GOTO 17          <107>
00052 W=PEEK(Y):IF (W-48)+R=9 THEN 60                 <251>
00054 GOTO 15                                         <056>
```

```
00060 FOR N=1 TO 5:POKE Y,86:FOR I=1 TO 60:NEXT I:P
      OKE Y,91:FOR I=1 TO 60:NEXT I:NEXT                    <067>
00062 POKE Y,43:FOR N=1 TO 50:NEXT :POKE Y,46:FOR N
      =1 TO 50:NEXT :POKE Y,32:FOR N=1 TO 30:NEXT           <115>
00065 POKE Y-40,32:P=P+10:IF P=200 OR P=400 OR P=60
      0 THEN B=B-26                                         <025>
00066 FOR N=1 TO 5:IF P=200*N THEN L=L+1:IF L=6 THE
      N 400                                                 <039>
00067 NEXT :PRINT "<HOME><7DOWN><7RIGHT>"L:PRINT "<
      HOME><5DOWN><7RIGHT>"P                                <197>
00070 GOTO 15                                               <072>
00100 Q=0:R=6                                               <171>
00101 FOR N=1 TO 3:FOR H=0 TO 9:POKE 55511+Q+H,R:NE
      XT H:Q=Q+40:NEXT N                                    <066>
00102 IF R=6 THEN R=14:GOTO 101                             <064>
00103 IF R=14 THEN R=3:GOTO 101                             <014>
00104 IF R=3 THEN R=1:GOTO 101                              <120>
00105 IF R=1 THEN 107                                       <153>
00106 GOTO 101                                              <066>
00107 Q=0:FOR N=1 TO 4:FOR H=1 TO 9:POKE 55351+Q+H,
      6:NEXT H:Q=Q+40:NEXT N:RETURN                         <022>
00110 FOR N=1184 TO 1195:POKE N,67:NEXT :FOR N=1184
       TO 1344 STEP 40:POKE N,66:NEXT                       <185>
00112 FOR N=1 TO 10:POKE 1344+N,67:NEXT :FOR N=1195
       TO 1344 STEP 40:POKE N,66:NEXT                       <142>
00114 POKE 1184,85:POKE 1195,73:POKE 1344,74:POKE 1
      355,75                                                <151>
00116 P=0:L=1:PRINT "<HOME><5DOWN><RIGHT>SCORE: 0<H
      OME><7DOWN><RIGHT>LEVEL:":POKE 1312,49                <082>
00118 FOR N=1212 TO 1223:POKE N,67:NEXT :FOR N=1372
       TO 1382:POKE N,67:NEXT                               <112>
00120 FOR N=1212 TO 1370 STEP 40:POKE N,66:NEXT :FO
      R N=1223 TO 1372 STEP 40:POKE N,66:NEXT               <130>
00122 POKE 1212,85:POKE 1223,73:POKE 1372,74:POKE 1
      383,75                                                <040>
00124 PRINT "<HOME><6DOWN><11LEFT>HIGH SCORE<DOWN><
      8LEFT>"N$"<HOME><8DOWN><8LEFT>"HS                     <138>
00125 POKE 1797,85:POKE 1810,73:POKE 1930,75:POKE 1
      917,74                                                <055>
00128 PRINT "<HOME><20DOWN><15RIGHT>NEW TETRIS<DOWN
      ><7LEFT>V1.7":RETURN                                  <141>
00300 IF P>HS THEN HS=P:POKE 49152,HS/256:POKE 4915
      3,HS-(PEEK(49152)*256):GOTO 308                       <144>
00302 GOTO 7                                                <015>
00308 PRINT "<HOME><20DOWN><15RIGHT>ENTER NAME<DOWN
      ><8LEFT>.....":P=0                                    <055>
00309 N$=""                                                 <136>
00310 POKE 1881+P,160                                       <106>
00313 GET A$:IF A$="" THEN 313                              <189>
00314 IF PEEK(197)=0 OR PEEK(197)=1 THEN 313                <158>
00316 IF A$=" " THEN 320                                    <253>
00317 IF A$="<RIGHT>" OR A$="<LEFT>" OR A$="<UP>" O
```

```
      R A$="<DOWN>" OR A$<"A" OR A$>"Z" THEN 313          <176>
00320 N$=N$+A$:POKE 49154+P,ASC(A$):IF LEN(N$)=6 TH
      EN 2000                                             <156>
00321 IF A$=" " THEN 323                                  <026>
00322 N=ASC(A$)-64:POKE 1881+P,N:P=P+1:GOTO 310           <207>
00323 POKE 1881+P,32:P=P+1:GOTO 310                       <130>
00400 PRINT "<HOME><C=7><20DOWN><13RIGHT><2SPACE>GA
      ME<2SPACE>OVER <DOWN><10LEFT><9SPACE>"              <044>
00402 WAIT 197,60                                         <054>
00405 PRINT "<C=3><CLR>":FOR Q=1 TO 5:READ A$:PRINT
                                                          <130>
00407 A$=LEFT$(A$,40):FOR C=1 TO LEN(A$)/2:B$=LEFT$
      (A$,C)+RIGHT$(A$,C)                                 <237>
00409 FOR D=0 TO 25:NEXT :PRINT SPC((40-LEN(B$))/2)
      ;"<UP>"B$:NEXT :NEXT                                <206>
00457 POKE 198,0:RESTORE:GOTO 300                         <059>
01000 POKE 147,0:SYS 57812"PHOBIA",8,1:SYS 62631          <004>
01002 IF PEEK(186)=1 OR STATUS=-128 OR ST=66 THEN 1
      020                                                 <185>
01003 HS=PEEK(49152)*256+PEEK(49153)                      <076>
01005 FOR N=0 TO 5:I=PEEK(49154+N):I$=CHR$(I):N$=N$
      +I$:NEXT :RETURN                                    <009>
01020 HS=55:N$="PHOBIA"                                   <190>
01025 RETURN                                              <067>
02000 IF PEEK(186)=1 THEN 7                               <245>
02003 PRINT "<HOME><20DOWN><15RIGHT>SCORE SAVE<DOWN
      ><8LEFT>(Y/N)<2SPACE>"                              <034>
02005 GET A$:IF A$="" THEN 2005                           <185>
02008 IF A$<>"Y" THEN 7                                   <071>
02015 SYS 49173:GOTO 7                                    <080>
04999 END                                                 <175>
05000 POKE 147,0:SYS 57812"SCR.SAVER",8,1:SYS 62631
                                                          <060>
05002 RETURN                                              <234>
05500 DATA " PROGRAMMED BY"                               <055>
05501 DATA " VIRUS OF PHOBIA"                             <068>
05502 DATA "GOOD IDEA BY"                                 <224>
05504 DATA " EMPEROR OF PHOBIA"                           <064>
05505 DATA " CONGRULATIONS"                               <083>
```

Özür

75. sayıdaki Solarpix adlı programın
60. satırda PP = 2×Π (P1)
290. satırda M = N×2×Π (P1)/256
1420. satırda J = INT (A/Π)
düzeltmeleri yapılmalıdır.

COMMMODRE 64 İLE PROGRAM YAZIYOR MUSUNUZ?

PROGRAM DÖKÜM EKİNDE YAYINLANMAYA HAK KAZANAN HER PROGRAMINIZA 30.000 TL. VERİYORUZ.

Yapmanız gereken, programlarınızı bir diskete kaydedip programınızın tam açıklaması ile adresimize yollamak.

Lütfen programlarınızı en ince detayına kadar anlatın ve gerekli birimleri de yazın (disk sürücü, joystick, dataset, v.s.). Programları SIMONS' BASIC ile yazdıysanız açıklamalarda belirtin. Ve tabii adınız, soyadınız, açık adresiniz ve posta kod numaranızı da yazın.

Programlarınızı bekliyoruz.

Adresimiz: **Commodore Dergisi**
Sakız Sok. Berkel Ap.
6/2 81300 KADIKÖY
İSTANBUL

PROGRAM ABONELİĞİ

EĞER Commodore Dergisi Program Döküm eki'nde yayınlanan programları her ay düzenli olarak bir diskette elde etmek istiyorsanız, programları yazmanın derdinden kurtulup düzenli bir arşive sahip olmak istiyorsanız, yıllık program aboneliğimizden yararlanın.

Bir yıl boyunca her ay düzenli olarak Döküm Eki'nde yayınlanan tüm programları içeren bir disket alacaksınız. Eğer ilgileniyorsanız gerekli şartlar için
(9-1) 346 86 48
no'lu telefondan Commodore Dergisi'ni arayın ve en kısa zamanda aboneliğiniz başlasın.